

AMENDMENTS TO THE CLAIMS:

This listing of the claims below will replace all prior versions and listing of claims in this application.

1. (Currently Amended) A method for growing augmenting the proliferation potency of pluripotent stem cells, comprising growing said pluripotent stem cells in a dispersed state while maintaining their undifferentiated state and pluripotency, in a liquid medium and a culturing vessel including immobilized or coated on a substrate solid phase surface a molecule which is adhesive to said pluripotent stem cells, without using feeder cells.
2. (Withdrawn) The method of claim 1, wherein said growing step is followed by transferring a gene into said pluripotent stem cells.
3. (Currently Amended) The method of claim 1 ~~or 2~~, wherein the molecule which is adhesive to said pluripotent stem cells is either a molecule that is expressed by said pluripotent stem cells or a molecule that is structurally homologous with said molecule and has homophilic binding ability with said pluripotent stem cells.
4. (Original) The method of claim 3, wherein the molecule which is adhesive to said pluripotent stem cells is a molecule belonging to the cadherin family.
5. (Original) The method of claim 4, wherein said molecule belonging to the cadherin family is E-cadherin, or a molecule which has structural homology with said molecule, which comprises the EC1 domain and one or more domains from among the EC2 domain, EC3 domain, EC4 domain and EC5 domain of E-cadherin, and which has homophilic binding ability with said pluripotent stem cells.
6. (Previously Presented) The method of claim 5, wherein said E-cadherin is obtained from a mammal.
7. (Previously Presented) The method of claim 6, wherein said E-cadherin is obtained from a human or mouse.

8. (Currently Amended) The method of claim 1 ~~or 2~~, wherein the molecule which is adhesive to said pluripotent stem cells is fused with an immunoglobulin Fc region and is immobilized on said substrate solid phase surface *via* said Fc region.

9. (Currently Amended) The method of claim 1 ~~or 2~~, wherein said pluripotent stem cells are mammalian embryonic stem cells (ES cells) or embryonic germ cells (EG cells).

10. (Canceled)

11. (New) The method of claim 2, wherein the molecule which is adhesive to said pluripotent stem cells is either a molecule that is expressed by said pluripotent stem cells or a molecule that is structurally homologous with said molecule and has homophilic binding ability with said pluripotent stem cells.

12. (New) The method of claim 11, wherein the molecule which is adhesive to said pluripotent stem cells is a molecule belonging to the cadherin family.

13. (New) The method of claim 12, wherein said molecule belonging to the cadherin family is E-cadherin, or a molecule which has structural homology with said molecule, which comprises the EC1 domain and one or more domains from among the EC2 domain, EC3 domain, EC4 domain and EC5 domain of E-cadherin, and which has homophilic binding ability with said pluripotent stem cells.

14. (New) The method of claim 13, wherein said E-cadherin is obtained from a mammal.

15. (New) The method of claim 14, wherein said E-cadherin is obtained from a human or mouse.

16. (New) The method of claim 2, wherein the molecule which is adhesive to said pluripotent stem cells is fused with an immunoglobulin Fc region and is immobilized on said substrate solid phase surface *via* said Fc region.

17. (New) The method of claim 2, wherein said pluripotent stem cells are mammalian embryonic stem cells (ES cells) or embryonic germ cells (EG cells).

18. (New) The method of claim 2, wherein the molecule which is adhesive to said pluripotent stem cells is E-cadherin obtained from a human or mouse and said pluripotent stem cells are mammalian embryonic stem cells (ES cells).

19. (New) The method of claim 1, wherein the molecule which is adhesive to said pluripotent stem cells is E-cadherin obtained from a human or mouse and said pluripotent stem cells are mammalian embryonic stem cells (ES cells).

20. (New) The method of claim 19, wherein the E-cadherin is fused with an immunoglobulin Fc region and is immobilized on said substrate solid phase surface *via* said Fc region.